

1 What is claimed is:

2

3 1. A computer readable medium on which is embedded computer software, the software

4 comprising:

5 a base class that defines a parent-child relationship by which a child object is

6 stored within the storage space of its parent object;

7 an inline class, wherein the inline class is an extension of the base class and

8 wherein a member of the inline class is permitted to be a child object but prohibited from

9 being a parent object; and

10 a container class, wherein the container class is an extension of the base class and

11 wherein a member of the container class is permitted to be a child object and/or a parent

12 object;

13 whereby a well-formed document can be modeled in software using members of the inline

14 and/or container classes.

15

16 2. The computer readable medium of claim 1 wherein the document is a markup language

17 document.

18

19 3. The computer readable medium of claim 2 wherein the markup language is selected

20 from the group consisting of HTML, XML, XHTML and SGML.

21

22 4. The computer readable medium of claim 1 wherein the software further comprises:

23 an extension of the inline class.

24

25 5. The computer readable medium of claim 4 wherein the extension of the inline class

26 corresponds to a document item selected from a group consisting of comment text,

27 formatted text, embedded text, an image, an anchor, a paragraph marker, a line break and

28 a horizontal rule.

29

30

- 1 **6.** The computer readable medium of claim 1 wherein the software further comprises:
2 an extension of the container class.
3
- 4 **7.** The computer readable medium of claim 6 wherein the extension of the container class
5 corresponds to a document item selected from a group consisting of a bold text item, a
6 horizontally centered item, a table, a subdocument and a selection list.
7
- 8 **8.** The computer readable medium of claim 1 wherein the container class corresponds to a
9 document item in which other items can be nested.
10
- 11 **9.** The computer readable medium of claim 1 wherein the software further comprises:
12 an extension to an extension of the inline and/or container classes.
13
- 14 **10.** A method for use in developing a document-producing computer program, the
15 method comprising the step of utilizing a set of classes, the set of classes comprising:
16 a base class that defines a parent-child relationship by which a child object is
17 stored within the storage space of its parent object;
18 an inline class, wherein the inline class is an extension of the base class and
19 wherein a member of the inline class is permitted to be a child object but prohibited from
20 being a parent object; and
21 a container class, wherein the container class is an extension of the base class and
22 wherein a member of the container class is permitted to be a child object and/or a parent
23 object.
24
- 25 **11.** The method of claim 10 wherein the document is a markup language document.
26
- 27 **12.** The computer readable medium of claim 11 wherein the markup language is selected
28 from the group consisting of HTML, XML, XHTML and SGML.
29
30

- 1 13. The method of claim 10 wherein the set of classes further comprises:
2 an extension of the inline class.
3
- 4 14. The method of claim 13 wherein the extension of the inline class corresponds to a
5 document item selected from a group consisting of comment text, formatted text,
6 embedded text, an image, an anchor, a paragraph marker, a line break and a horizontal
7 rule.
8
- 9 15. The method of claim 10 wherein the set of classes further comprises:
10 an extension of the container class.
11
- 12 16. The method of claim 15 wherein the extension of the container class corresponds to a
13 document item selected from a group consisting of a bold text item, a horizontally
14 centered item, a table, a subdocument and a selection list.
15
- 16 17. The method of claim 10 wherein the container class corresponds to a document item
17 in which other items can be nested.
18
- 19 18. The method of claim 10 wherein the set of classes further comprises:
20 an extension to an extension of the inline and/or container classes.
21
- 22 19. The method of claim 10 wherein the utilizing step comprises:
23 linking to a library containing the set of classes; and
24 programmatically invoking an extension of the inline and/or container classes.
25
- 26 20. A computer readable medium on which is embedded a document-producing computer
27 program, the computer program comprising a product of a method, the method comprising
28 the step of utilizing a set of classes, the set of classes comprising:
29 a base class that defines a parent-child relationship by which a child object is
30 stored within the storage space of its parent object;

1 an inline class, wherein the inline class is an extension of the base class and
2 wherein a member of the inline class is permitted to be a child object but prohibited from
3 being a parent object; and
4 a container class, wherein the container class is an extension of the base class and
5 wherein a member of the container class is permitted to be a child object and/or a parent
6 object.
7